

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference P38158-P0	FOR FURTHER ACTION	See item 4 below
International application No. PCT/JP2005/010893	International filing date (<i>day/month/year</i>) 14 June 2005 (14.06.2005)	Priority date (<i>day/month/year</i>) 15 June 2004 (15.06.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).
 2. This REPORT consists of a total of 5 sheets, including this cover sheet.
- In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Date of issuance of this report 20 December 2006 (20.12.2006) Authorized officer <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Masashi Honda</div> e-mail: pt08@wipo.int
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PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference P38158-P0		FOR FURTHER ACTION See paragraph 2 below	
International application No. PCT/JP2005/010893	International filing date (day/month/year) 14.06.2005	Priority date (day/month/year) 15.06.2004	
International Patent Classification (IPC) or both national classification and IPC			
Applicant MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.			

1. This opinion contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the opinion |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP	Authorized officer
Facsimile No.	Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/010893

Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐

This opinion has been established on the basis of a translation from the original language into the following language

_____, which is the language of a translation furnished for the purposes of international search (under

Rule 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐

a sequence listing

☐

table(s) related to the sequence listing

b. format of material

☐

in written format

☐

in computer readable form

c. time of filing/furnishing

☐

contained in the international application as filed.

☐

filed together with the international application in computer readable form.

☐

furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2005/010893

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1, 2	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1, 2	NO
Industrial applicability (IA)	Claims	1, 2	YES
	Claims		NO

2. Citations and explanations:

Claim: 1

Document 1: JP 10-320924 A (Canon Inc.), 04 December 1998, paragraphs 0017 to 0035; Figs. 1 to 8

Document 1 discloses art such that a drive device which records data to write-once-read-many recording media in sequence of increasing address, judges whether or not recording is already finished for the address targeted for adding during data recording. If recording at the target address is already finished, or in other words, if the target address is the same or smaller than the address of the last recorded position in the data area, the drive device performs substitution processing; and if recording at the target address is not already finished, or in other words, if the target address is larger than the address of the last recorded position in the data area, the drive device records the data at the target address.

Document 2: JP 04-037924 A (Fujitsu Ltd.), 07 February 1992, page 4, upper left column to page 8, upper left column; Figs. 1 to 4

Document 2 discloses art such that data temporarily is stored in buffer the data supplied from a host, if the sector specified as the write destination for the data stored in the data buffer is a faulty sector, the write processing is skipped; if the sector is normal and has no faults, processing that writes the data in the specified sector is performed; and after the above processes have been performed for all the sectors, processing that writes in alternate sectors the data for which write processing was skipped is performed.

It would be easy for a party skilled in the art to combine the art of cited documents 1 and 2, which belong to the technical field of information recording devices that perform substitution processing.

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V

Claim 2

Document 1

Document 3: JP 05-173726 A (NEC Ibaraki Ltd.), 13 July 1993, paragraph 0011

Document 3 discloses art for judging whether an address is a substitution for an address specified when a write instruction was issued from a central processing unit.

Document 4: JP 2001-184642 A (Hitachi, Ltd.), 06 July 2001, paragraphs 0044 to 0053; Fig. 2

Document 4 discloses art for determining whether or not Read Modify Write processing is required.

Document 5: JP 11-007731 A (Olympus Optical Co., Ltd.), 12 January 1999, paragraphs 0018 to 0028; Figs. 5 to 8

Document 5 discloses art, when data needs to be rewritten correctly, for recording data in the same data area and in an unused sector near to the sector where writing failed.

It would be easy for a party skilled in the art to combine the art of cited documents 1 and 3 to 5, which belong to the technical field of information recording regeneration devices.

Deciding that the conditions for determining that a specified position in the user data area, which is a position specified for a substitution cluster near the recording position, is the recording position where data should be recorded, are if a substitution cluster is used instead of the ECC cluster that includes a position specified by the recording instruction, and if it is determined that RMW processing is required, is merely a matter that could be appropriately achieved by a party skilled in the art and accomplishes no exceptional effects compared with the inventions described in cited document 1 and 3 to 5.